EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Kelly Davis on December 17,2010.

The application has been amended as follows:

Claim 12 has been amended to read:

12. (Currently amended) A method for manufacturing a wafer using an epitaxy process that involves heating the wafer to a deposition temperature, the method comprising the steps of:

during a high-pressure calibration mode:

heating a susceptor and a wafer at a high-gas pressure;

receiving an optical radiation signal from a backside of the wafer;

filtering out a spectrum of the radiation signal for which the wafer is opaque;

converting the filtered radiation signal into an electrical signal;

measuring the temperature of a susceptor holding the wafer, and

storing a value of the electrical signal when the ~~measures~~ measured temperature of the susceptor corresponds to the deposition temperature; and

during a subsequent deposition process carried out at a lower-gas pressure than

the high-gas pressure:

controlling a wafer temperature by keeping, the electrical signal constant at the stored value.

2. The following is an examiner's statement of reasons for allowance: the apparatus as claimed in claim 1, specifically, a control system that is configured to maintain a deposition temperature of the wafer by calibrating the optical signal measurer by measuring a temperature of the susceptor at a first gas pressure; determining a signal level of the electrical signal when the measured temperature of the susceptor is at the deposition temperature, and by keeping, during a subsequent deposition cycle at a second gas pressure that is less than the first gas pressure, the electrical signal constant at the determined signal level, and the method as claimed in claim 12, specifically, steps of: during a high-pressure calibration mode: heating a susceptor and a wafer at a high-gas pressure; receiving an optical radiation signal from a backside of the wafer; filtering out a spectrum of the radiation signal for which the wafer is opaque; converting the filtered radiation signal into an electrical signal; measuring the temperature of a susceptor holding the wafer, and storing a value of the electrical signal when the measured temperature of the susceptor corresponds to the deposition temperature; and during a subsequent deposition process carried out at a lower-gas pressure than the high-gas pressure: controlling a wafer temperature by keeping, the electrical signal constant at the stored value were not found in or suggested by the art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrie R. Lund whose telephone number is (571) 272-1437. The examiner can normally be reached on Monday-Friday (9:00 am -5:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on (571) 272-1435. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeffrie R. Lund/
Primary Examiner
Art Unit 1716

JRL
12/18/2010